### Background

Approximately 108 million American adults are overweight or obese.

#### Increased risk of:

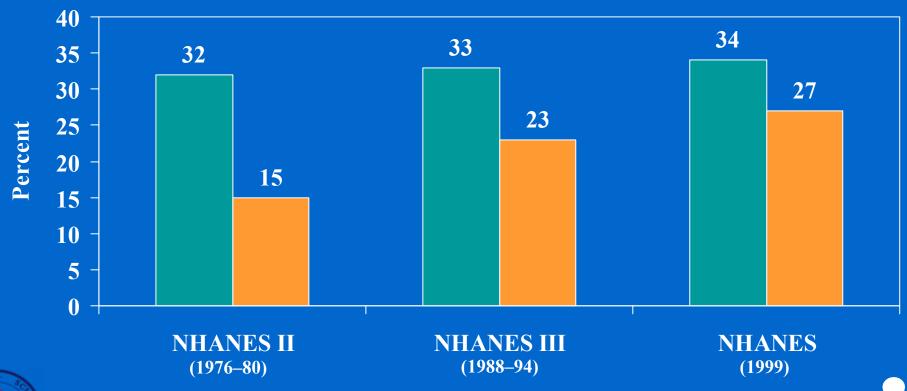
- Hypertension
- Type 2 diabetes
- Coronary heart disease
- Gallbladder disease
- Certain cancers

- Dyslipidemia
- Stroke
- Osteoarthritis
- Sleep apnea



# Age-Adjusted Prevalence of Overweight and Obesity in Adults (20-74 yrs)

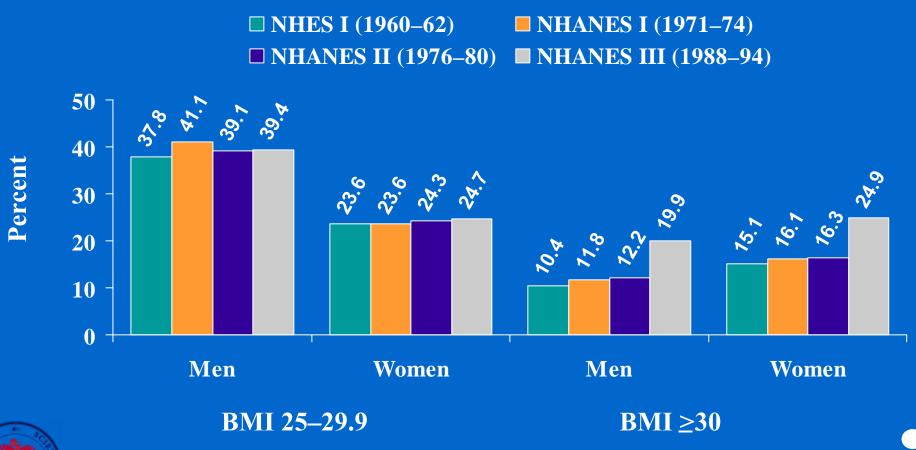
**□** BMI (25-29.9) **■** BMI (≥ 30)







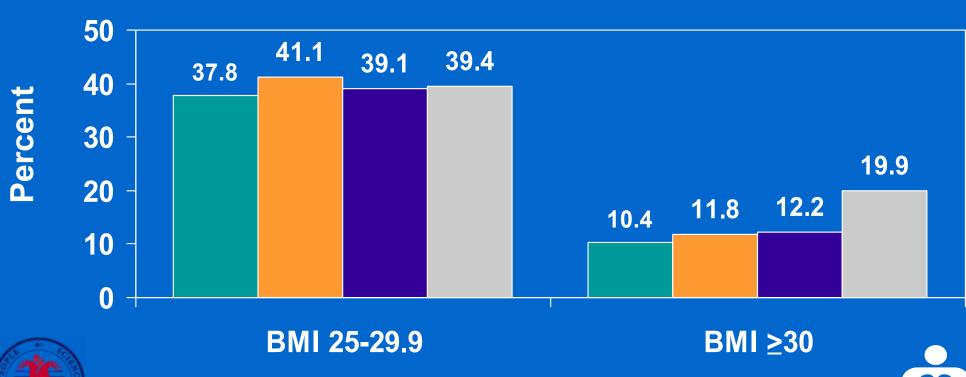
## Age-Adjusted Prevalence of Overweight (BMI 25–29.9) and Obesity (BMI ≥30)





# Age-Adjusted Prevalence of Overweight and Obesity in Men

- NHES (1960–62) NHANES I (1971–74)
- NHANES II (1976–80) NHANES III (1988–94)

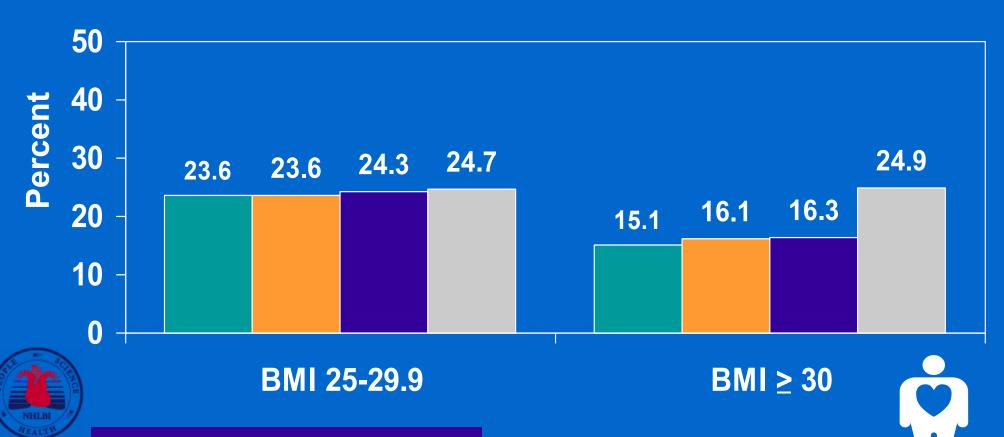




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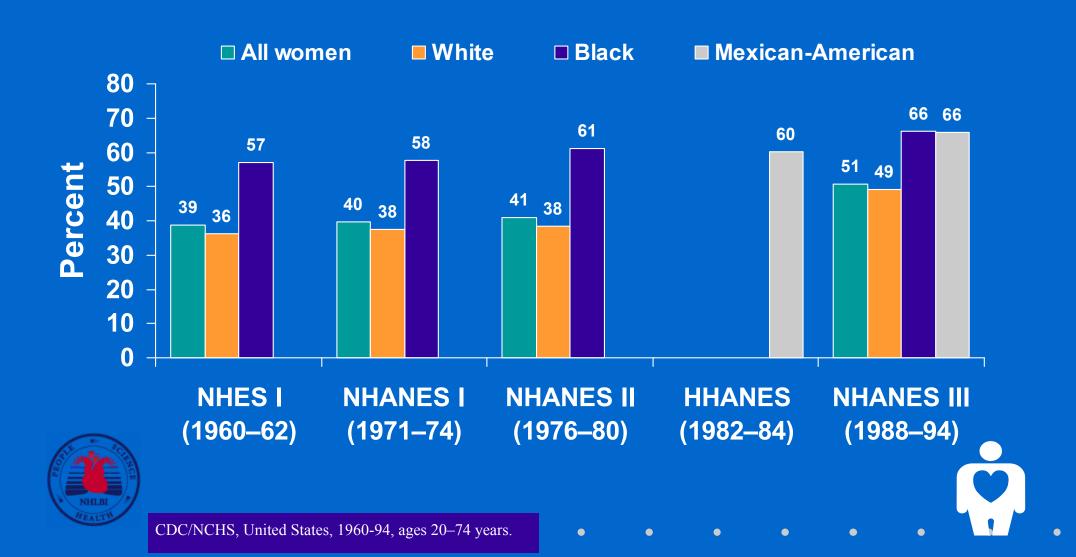
# Age-Adjusted Prevalence of Overweight and Obesity in Women

- □ NHES (1960–62) NHANES I (1971–74)
- NHANES II (1976–80) NHANES III (1988–94)

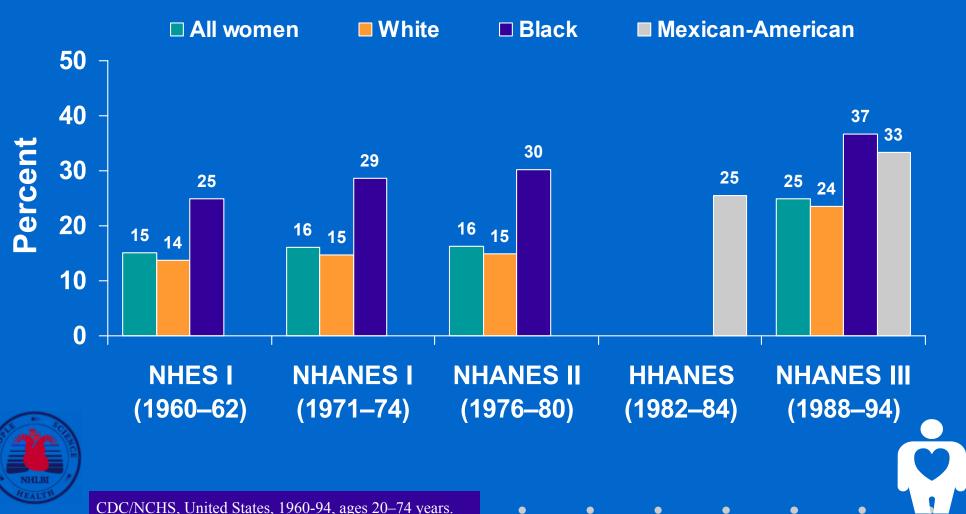


CDC/NCHS, United States, 1960-94, ages 20–74 years.

### Age-Adjusted Prevalence of Overweight and Obesity (BMI ≥25) in All Groups of Women

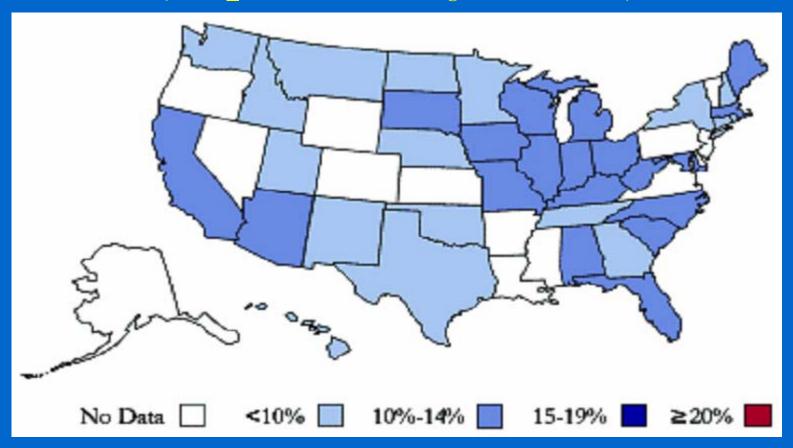


#### **Age-Adjusted Prevalence of Obesity** (BMI >30) in All Groups of Women



### Obesity Trends\* Among U.S. Adults: BRFSS, 1988

(\*BMI  $\geq$  30, or ~ 30 lbs overweight for 5'4" woman)

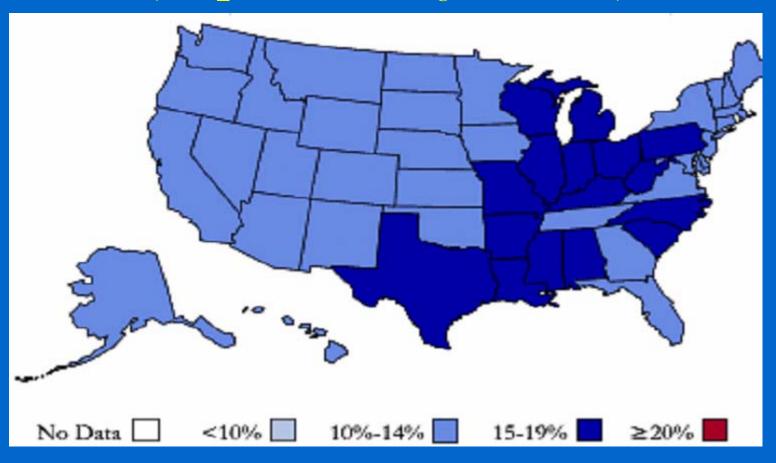






### Obesity Trends\* Among U.S. Adults: BRFSS, 1994

(\*BMI  $\geq$  30, or  $\sim$  30 lbs overweight for 5'4" woman)

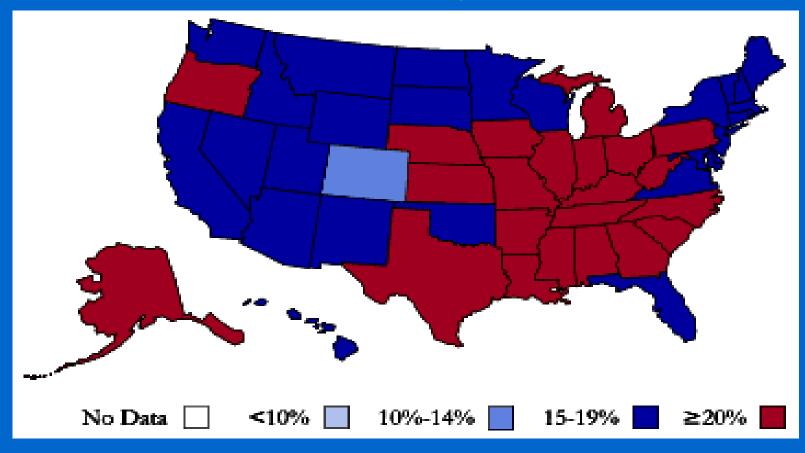






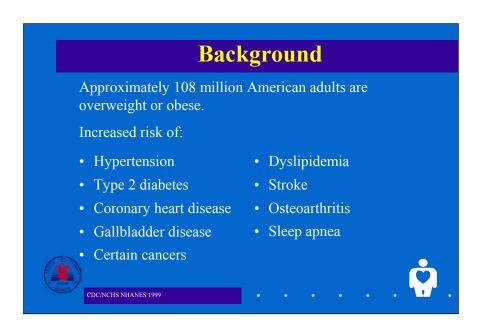
### Obesity Trends Among\* U.S. Adults: BRFSS, 2000

(\*BMI  $\geq$  30, or  $\sim$  30 lbs overweight for 5'4" woman)



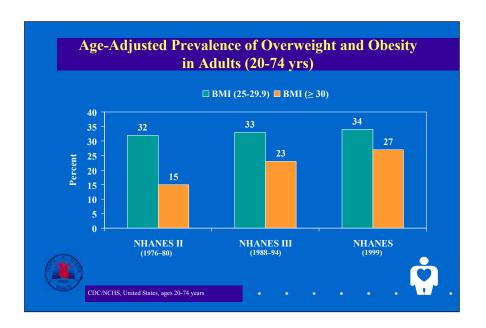




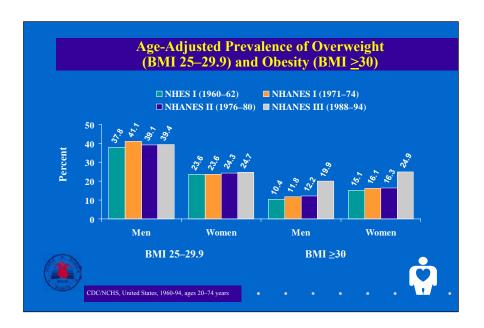


Based on the 1999 NHANES data, about 61 percent of adults, or an estimated 108 million adults, in the United States are overweight or obese, a condition that substantially increases their risk for hypertension, dyslipidemia, type 2 diabetes, stroke, coronary heart disease, osteoarthritis, gallbladder disease, sleep apnea and respiratory problems, and endometrial, breast, prostate, and colon cancers.

- Higher body weight is also associated with increases in all-cause mortality.
- Obese individuals may also suffer from social stigmatization and discrimination.

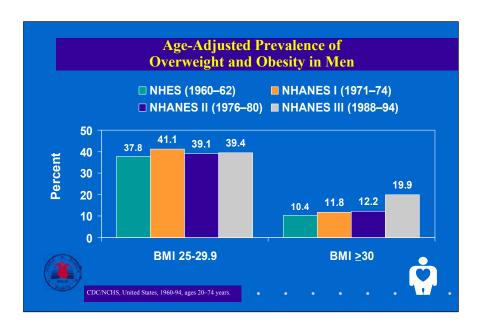


The overall increases in overweight and obesity in adults are evident from looking at the data from the NHANES II to NHANES 1999 surveys. Using the expert panel's definition of overweight as a BMI of 25 to  $29.9 \text{ kg/m}^2$  and of obesity as a BMI of  $\geq 30 \text{ kg/m}^2$ , this slide shows the increase in overweight prevalence from 32 percent in the late 1970s to 34 percent of adults aged 20 to 74 years in 1999. And, an increase in obesity from 15 percent to 27 percent of adults.



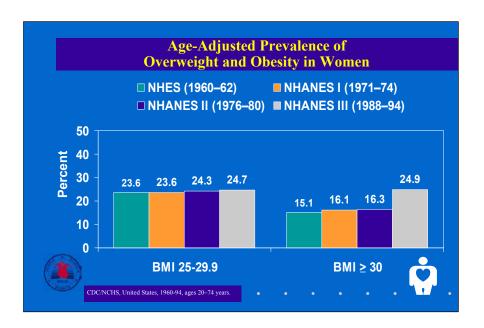
This slide depicts data from several NHANES surveys on the age-adjusted prevalence of overweight and obesity in men and women.

- From 1960 to 1994, the prevalence of overweight increased slightly from 37.8 to 39.4 percent in men and from 23.6 to 24.7 percent in women. In men and women together, overweight increased from 30.5 to 32.0 percent.
- During the same time period, however, the prevalence of obesity increased from 10.4 to 19.9 percent in men and from 15.1 to 24.9 percent in women. In men and women together, obesity increased from 12.8 to 22.5 percent. Most of the increase in obesity occurred in the past decade.



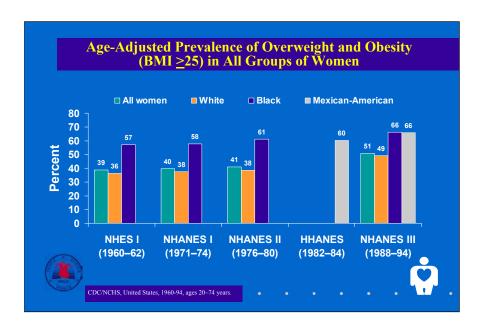
This slide depicts data on men from several NHANES surveys using the panel's definition of overweight as a BMI of 25 to 29.9 kg/m<sup>2</sup> and of obesity as a BMI of greater than or equal to 30 kg/m<sup>2</sup>.

- From 1960 to 1994, the prevalence of overweight in men increased slightly from 37.8 to 39.4 percent.
- During the same time period, however, the prevalence of obesity in men increased from 10.4 to 19.9.



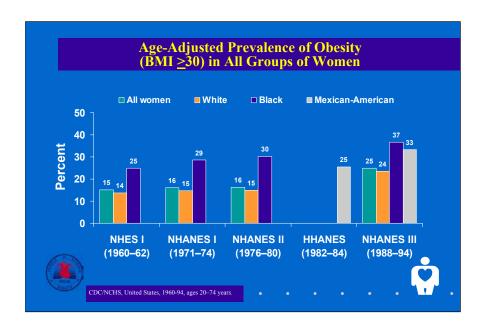
This slide depicts data on women from several NHANES surveys using the panel's definition of overweight as a BMI of 25 to  $29.9 \text{ kg/m}^2$  and of obesity as a BMI of greater than or equal to  $30 \text{ kg/m}^2$ .

- From 1960 to 1994, the prevalence of overweight in women increased slightly from 23.6 to 24.7 percent.
- During the same time period, however, the prevalence of obesity in women increased from 15.1 to 24.9 percent. Most of the increase in obesity occurred in the past decade.



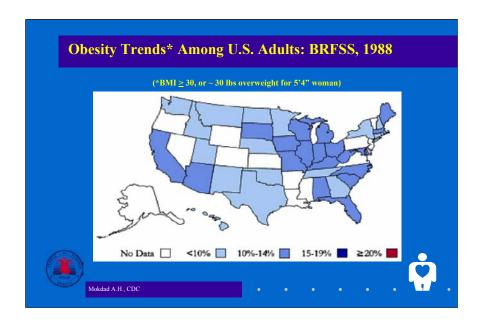
The data here show the trends for the combined prevalence of overweight and obesity, defined as a BMI of ≥25.0 kg/m², among different race groups of women ages 20 to 74 years in the United States from 1960 to 1994.

- The increase in overweight and obesity appears to have occurred among all racial groups of U.S. women.
- The NHANES III data show that 51 percent of all women in the United States are overweight or obese. The prevalence is much higher in non-Hispanic black women (66 percent) and in Mexican-American women (66 percent) than it is in white women where the prevalence is 49 percent.
- This slide does not show the prevalence of overweight in American Indian women where, according to the Strong Heart Study, rates in 1988 to 89 were at 80 percent of women in Arizona, 71 percent of women in Oklahoma, and 66 percent of women in North and South Dakota.



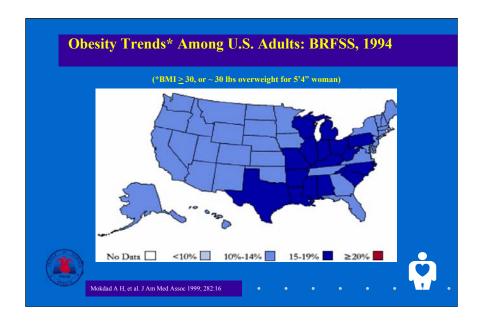
Using the definition of obesity as a BMI  $\geq$ 30 kg/m<sup>2</sup>, the NHANES III data reveal that obesity has increased in all groups of women.

- However, we see a dramatic increase occurring in NHANES III when it jumped to 25.0 percent for all women. The largest increase in obesity prevalence from NHANES II to NHANES III is in white women, which increased from 15 to 24 percent.
- However, the prevalence of obesity is higher in minority women, being 37 percent in non-Hispanic black women and 33 percent in Mexican-American women.
- Women in the United States with low incomes or low education are more likely to be obese than those of higher socioeconomic status.



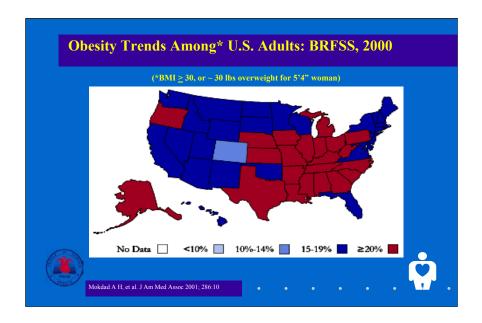
The Behavioral Risk Factor Surveillance System (BRFSS) data provide a look at the regions of the country where obesity rates are highest. Obesity is defined as a BMI of  $\geq$  30, or approximately 30 pounds overweight. The light blue states are those where obesity affects less than 10 percent of adults, the rates increase to 10 to 14 percent of adults in the medium blue states, 15-19 percent in the dark blue states, and  $\geq$  20 percent of adults in the red states.

In 1988, there were 17 states in the light blue, 19 in the medium blue, none in dark blue or red.



In just 6 years, the number of states with the higher rates of obesity has increased as obesity continues to rise in men and women across all sociodemographic groups. The magnitude of the increase varies by region of the country and by state.

Thirty-four states are now medium blue with obesity rates of 10-14 percent while 16 states are dark blue with obesity rates of 15-19 percent.



The most recent BRFSS data show that obesity rates are highest in most states across the country. There is only 1 medium blue state with obesity rates of 10-14 percent; 27 states are dark blue with obesity rates of 15-19 percent while 22 states are red and have obesity rates greater than or equal to 20 percent.